

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (original) An aqueous solution suitable for intranasal administration, which comprises from 0.1 to 10 mg/ml of buprenorphine or a physiologically acceptable salt or ester thereof and from 5 to 40 mg/ml of a pectin having a degree of esterification of less than 50%; which solution has a pH of from 3 to 4.2, is substantially free from divalent metal ions and gels on the nasal mucosa.

2. (original) A solution according to claim 1, wherein the buprenorphine or buprenorphine salt or ester is present in an amount of from 0.5 to 8 mg/ml.

3. (original) A solution according to claim 2, wherein the buprenorphine or buprenorphine salt or ester is present in an amount of from 1 to 6 mg/ml calculated as buprenorphine.

4. (previously presented) A solution according to claim 1, which comprises buprenorphine hydrochloride.

5. (previously presented) A solution according to claim 1, wherein the pectin is present in an amount of from 10 to 30 mg/ml.

6. (previously presented) A solution according to claim 1, wherein the pectin has a degree of esterification of from 10 to 35%.

7. (previously presented) A solution according to claim 1, wherein the pH is from 3.5 to 4.0.

8. (previously presented) A solution according to claim 1, wherein the pH has been adjusted by means of hydrochloric acid.

9. (previously presented) A solution according to claim 1, which comprises a preservative.

10. (original) A solution according to claim 9, which comprises phenylethyl alcohol and propyl hydroxybenzoate as preservatives.

11. (previously presented) A solution according to claim 1, which has an osmolality of from 0.35 to 0.5 osmol/kg.

12. (previously presented) A solution according to claim 1, which contains dextrose as a tonicity adjustment agent.

13. (original) An aqueous solution suitable for intranasal administration, which has a pH of from 3.5 to 4.0, which is substantially free from divalent metal ions and which comprises:

(a) from 1 to 6 mg/ml of buprenorphine or a physiologically acceptable salt or ester thereof, calculated as buprenorphine,

(b) from 10 to 40 mg/ml of a pectin which has a degree of esterification from 10 to 35%, and

(c) dextrose as a tonicity adjustment agent.

14. (original) A process for the preparation of an aqueous solution as defined in claim 1, which process comprises dissolving buprenorphine or a physiologically acceptable salt or ester thereof in water; mixing the resulting solution with a solution in water of a pectin having a degree of esterification of less than 50% such that the mixed solution comprises from 0.1 to 10 mg/ml of buprenorphine or said salt or ester thereof and from 5 to 40 mg/ml of the pectin; and adjusting the pH of the solution to a value from 3 to 4.2 if desired.

15. (original) A process according to claim 14, wherein the resulting solution is introduced into a nasal delivery device.

Claim 16-37 (Cancelled).

38. (previously presented) A nasal delivery device loaded with a solution as claimed in claim 1.

39. (original) A device according to claim 38, which is a spray device.

Claim 40 (Cancelled).

41. (previously presented) A method of inducing analgesia in a patient in need thereof, which method comprises intranasally administering an aqueous solution as defined in claim 1.

Claims 42-47 (Cancelled).

48. (previously presented) A pharmaceutical composition suitable for use as an analgesic which comprises buprenorphine or a physiologically acceptable salt or ester thereof and a delivery agent whereby, on introduction into the nasal cavity of a patient to be treated, the buprenorphine or salt or ester thereof is delivered to the bloodstream to produce within 0.5 to 20 minutes a therapeutic plasma concentration C_{ther} of 0.8 to 5 ng/ml which is maintained for a duration T_{maint} of at least 2 hours.

49. (previously presented) A method of inducing analgesia in a patient in need thereof, which method comprises administering intranasally to said patient a pharmaceutical composition which comprises buprenorphine or a physiologically acceptable salt or ester thereof and a delivery agent whereby, on introduction into the nasal cavity of said patient to be treated, the buprenorphine or salt or ester thereof is delivered to the bloodstream to produce within 0.5 to 20 minutes a therapeutic plasma concentration C_{ther} of 0.8 to 5ng/ml which is maintained for a duration T_{maint} of at least 2 hours.

50. (original) A method according to claim 49, wherein a unit dosage of 0.1 to 0.6 mg of buprenorphine or buprenorphine salt or ester, calculated as buprenorphine, is administered intranasally.

51. (previously presented) A method according to claim 49, wherein the T_{main} is from 2 to 4 hours.

52. (previously presented) A pharmaceutical composition according to claim 48, wherein T_{main} is from 2 to 4 hours.

Claims 53-66. (cancelled)

67. (previously presented) A pharmaceutical composition suitable for use as an analgesia which comprises buprenorphine or a physiologically acceptable salt or ester thereof and a delivery agent whereby, on introduction into the nasal cavity of a patient to be treated, the buprenorphine or salt or ester thereof is delivered to the bloodstream to produce within 2 to 15 minutes a therapeutic plasma concentration C_{ther} of 0.4 to 5 ng/ml which is maintained for a duration T_{maint} of from 2 to 4 hours.

68. (previously presented) A method of inducing analgesia in a patient in need thereof, which method comprises administering intranasally to said patient a pharmaceutical composition which comprises buprenorphine or a physiologically acceptable salt or ester thereof and a delivery agent whereby, on introduction into the nasal cavity of said patient to be treated, the buprenorphine or salt or ester thereof is delivered to the bloodstream to produce within 2 to 15 minutes a therapeutic plasma concentration C_{ther} of 0.4 to 5ng which is maintained for a duration T_{maint} of from 2 to 4 hours.

69. (previously presented) A method according to claim 68, wherein a unit dosage of 0.1 to 0.6 mg of buprenorphine or buprenorphine salt or ester, calculated as buprenorphine, is administered intranasally.

70. (previously presented) An aqueous solution suitable for intranasal administration, which comprises from 0.1 to 10 mg/ml of buprenorphine or a physiologically acceptable salt or ester thereof and from 5 to 40 mg/ml of a pectin having a degree of esterification of less than 50%; which solution has a pH of from 3 to 4.2, is substantially free from divalent metal ions and gels on the nasal mucosa, whereby, on introduction into the nasal cavity of a patient to be treated, the buprenorphine or salt or ester thereof is delivered to the bloodstream to produce within 2 to 15 minutes a therapeutic plasma concentration C_{ther} of 0.8 to 5 ng/ml which is maintained for a duration T_{maint} of at least 2 hours.

71. (previously presented) An aqueous solution suitable for intranasal administration, which has a pH of from 3.5 to 4.0, which is substantially free from divalent metal ions and which comprises:

- (a) from 1 to 6 mg/ml of buprenorphine or a physiologically acceptable salt or ester thereof, calculated as buprenorphine,
- (b) from 10 to 40 mg/ml of a pectin which has a degree of esterification from 10 to 35%, and
- (c) dextrose as a tonicity adjustment agent,

whereby, on introduction into the nasal cavity of a patient to be treated, the buprenorphine or salt or ester thereof is delivered to the bloodstream to produce within 2 to 15 minutes a therapeutic plasma concentration C_{ther} of 0.8 to 5 ng/ml which is maintained for a duration T_{maint} of at least 2 hours.

72. (new) An aqueous solution suitable for intranasal administration, which comprises from 0.1 to 10 mg/ml of buprenorphine or a physiologically acceptable salt or ester thereof and from 5 to 40 mg/ml of a pectin having a degree of esterification of less than 50%; which solution has a pH of from 3 to 4.2, is substantially free from divalent metal ions and gels on the nasal mucosa, wherein said solution provides a peak plasma concentration (C_{\max}) of the buprenorphine or physiologically acceptable salt or ester thereof in 20 minutes or less (T_{\max}) on introduction into the nasal cavity of a patient to be treated.

73. (new) A solution according to claim 72 which provides a bioavailability of 80% or more.

74. (new) An aqueous solution suitable for intranasal administration, which comprises from 0.1 to 10 mg/ml of buprenorphine or a physiologically acceptable salt or ester thereof and from 5 to 40 mg/ml of a pectin having a degree of esterification of less than 50%; which solution has a pH of from 3 to 4.2, is substantially free from divalent metal ions and gels on the nasal mucosa, wherein said solution provides a peak plasma concentration (C_{\max}) of the buprenorphine or physiologically acceptable salt or ester thereof in 10 to 30 minutes (T_{\max}) on introduction into the nasal cavity of a patient to be treated.

75. (new) A solution according to claim 74 wherein the T_{\max} is 15 to 25 minutes.

76. (new) A solution according to claim 75 wherein the T_{\max} is 15 to 20 minutes.

77. (new) A solution according to claim 74 wherein the T_{\max} is 10 to 20 minutes.

78. (new) A solution according to claim 74 which provides a bioavailability of 80% or more.

79. (new) An aqueous solution suitable for intranasal administration, which comprises from 0.1 to 10 mg/ml of buprenorphine or a physiologically acceptable salt or ester

thereof and from 5 to 40 mg/ml of a pectin having a degree of esterification of less than 50%; which solution has a pH of from 3 to 4.2, is substantially free from divalent metal ions and gels on the nasal mucosa, wherein said solution provides a bioavailability of 80% or more of the buprenorphine or physiologically acceptable salt or ester thereof on introduction into the nasal cavity of a patient to be treated.